

# A REVIEW OF *LAEPHOTIS* THOMAS, 1901 (CHIROPTERA : VESPERTILIONIDAE)

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## INTRODUCTION

IN recent years the African genus *Laephotis* Thomas, 1901 has been considered monotypic (e.g. Ellérman, Morrison-Scott & Hayman, 1953 : 78) with one subspecies, *L. wintoni wintoni* Thomas, 1901 in Kenya and a second, *L. w. angolensis* Monard, 1935 in Angola, Zambia, Botswana and the southern part of Zaire. However, Peterson (1971) while reporting a further example from Kenya reviewed much of the limited material of *Laephotis* available in collections and was led to suggest that *wintoni* and *angolensis* might represent distinct species, with the possibility that a third undescribed taxon might occur in Zambia. Setzer (1971) treated *wintoni* and *angolensis* as specifically distinct (as had Monard when describing the latter) and described two further species, *namibensis* from the Namib Desert, South West Africa, and *botswanae* from Botswana, Zambia and southern Zaire. Although this author referred to *botswanae* a number of the specimens from Zambia and southern Zaire hitherto allocated to *angolensis*, he did not have available all of the material so reported : in particular he did not examine the specimen (in the Harrison Zoological Museum, Sevenoaks, England) from Ndola, Zambia, which Peterson (1971 : 888) then thought could represent either the then unknown female of *wintoni* or possibly an unnamed taxon. More recently, Peterson (1973 : 602), in describing the first known female of *wintoni* has suggested that the specimen from Ndola may be more closely related to *botswanae* than to other specimens from Zambia or Zaire.

Current accessions to the collections of the British Museum (Natural History) have included three female specimens of *L. wintoni* from Ethiopia, whence the genus has been hitherto unreported. These have led to a further examination of the seven examples of *Laephotis* already in the collections in London, together with six from Zaire in the Musée Royal de l'Afrique Centrale, Tervuren, Belgium, and of two specimens in the Harrison Zoological Museum, one the apparently enigmatic example from Ndola. The four species recognized by Setzer (1971) are retained : *wintoni* and *namibensis* are apparently very similar but differ much more sharply from *angolensis* and *botswanae* than do these from each other.

## SYSTEMATIC SECTION

### *LAEPHOTIS* Thomas, 1901

*Laephotis* Thomas, 1901 : 460.

TYPE SPECIES. *Laephotis wintoni* Thomas, 1901.

Head low, flat-crowned ; muzzle broad, flat, the nostrils opening sublaterally ; ears moderate to large, when laid forward reaching to or beyond the tip of the

muzzle, more or less triangular in outline; anterior margin of the ear originating near the centre of the forehead, lacking any posteriorly directed basal lobe but with a distinct basal fold; anterior margin convex proximally then less so or nearly straight; tip rounded; posterior margin of ear slightly emarginated just below tip, otherwise convex, with moderate rounded or semi-circular antitragal lobe, terminating just behind the angle of the mouth. Tragus (Fig. 1) as a rule rather wide, about one-third the length of the ear, its anterior margin slightly concave, tip bluntly pointed, anteriorly directed; posterior margin of tragus convex or angular, a small triangular lobe at its base. Calcar extending along about two-thirds of the uropatagial margin, with small, rounded post-calcarial lobe. Seven palate ridges in *L. wintoni* from Ethiopia, the first and second uninterrupted, the last reduced but also complete (Fig. 2): however, Peterson (1973: 602, fig. 1) reported six ridges only in a subadult female of *L. wintoni* from Kenya.

Skull with slightly flattened braincase; slight lambdoid but no sagittal crest; rostrum rather narrow, unexpanded, with little supraorbital inflation; a shallow, median rostral depression; zygomata slender; narial emargination narrow, broadly U-shaped but slightly angular, extending posteriorly to or a little beyond a line joining the anterior margins of the anteorbital foramina; pre-palatal emargination extending laterally a little beyond the inner faces of  $i^{2-2}$  and posteriorly almost to a line joining the posterior faces of  $c^{1-1}$ ; palate long, rather narrow, strongly domed; maxillary toothrows usually almost parallel; post-palatal extension moderate to long, its length from a line across the rear faces of  $m^{3-3}$  to the tips of the pterygoid hamulars approaching or equal to the length of the palate from the same line to the back of the pre-palatal emargination (Table 2); short, broad post-palatal spine; pterygoid hamulars strong, sharply deflected inwards; bullae inflated, large.

Dentition  $i \frac{2}{3}$ ,  $c \frac{1}{1}$ ,  $pm \frac{1}{2}$ ,  $m \frac{3}{3} = 32$ . Inner upper incisor ( $i^2$ ) long, with secondary postero-internal cusp extending almost to its tip;  $i^3$  small, a little wider than long, its main cusp barely extending above the cingulum of  $i^2$ , with small internal basal cusp, in toothrow, touching  $i^2$ , separated from  $c^1$  by a narrow space;  $c^1$  normal;  $pm^4$  a little wider than long, in contact with  $c^1$ ;  $m^3$  not reduced, with metacone and three commissures;  $i_{1-3}$  tricuspid, imbricated,  $i_3$  slightly the largest;  $c_1$  reduced, weak, little higher than  $pm_4$ ;  $pm_2$  reduced, about one-half the height and one-quarter or a little more the crown area of  $pm_4$ , tightly compressed in toothrow;  $m_3$  little reduced, the hypoconid and entoconid well developed.

The genus occurs in Ethiopia and Kenya, in southern Zaire, Zambia, Botswana, South West Africa and in Angola. It appears to be related to *Eptesicus*.

### *Laephotis wintoni* Thomas, 1901

*Laephotis wintoni* Thomas, 1901: 460. Kitui, Kenya, c. 3500 ft.

Size large for the genus (length of forearm 36–41 mm, condylobasal length 15.2–15.8 mm) with very large ears (length from meatus 21 mm or more); tragus broad, at its widest at about one-third of its height from its base, its posterior margin strongly convex, sometimes slightly angular (Fig. 1a). Dorsal surface a shade of

mid-brown, the pelage dark based with brown, slightly coppery tips ; ventral surface similar but paler, the hairs similarly dark based but with paler brown or, especially posteriorly, with buffy white tips. Skull elongate with long narrow rostrum ; palate long, the maxillary toothrows nearly parallel ; post-palatal extension very long, its length from a line across the rear faces of  $m^{3-3}$  to the tips of the pterygoid hamulars equal or nearly equal to the length of the palate from the same line to the back of the pre-palatal emargination ; bony post-palate long, its length from a line across the rear faces of  $m^{3-3}$  to the anterior edge of the mesopterygoid fossa exceeding the distance from the anterior edge of the mesopterygoid fossa to the tips of the pterygoid hamulars (Table 2).

The female of *wintoni* has remained unknown until recently. Peterson (1971 : 888) speculated that a female specimen (1.2533) in the Harrison Zoological Museum, Sevenoaks, from Ndola, Zambia, considerably smaller than the male examples that he had examined, might represent it. Setzer (1971 : 264) noted that data presented by Peterson (p. 886) for specimens of *Laephotis* in the British Museum (Natural History) from Zaire reveal a slight sexual variation, females being on the average a little larger than males in external and cranial measurements. However, the skull had not then been extracted from the sole male specimen (B.M. 57.435, in alcohol) in this series (B.M. 57.435-438) which apparently represents two species (vide infra). The measurements given by Peterson show a female (B.M. 55.1135) from Zambia to be externally a little larger on the whole than a male (B.M. 55.1134) obtained at the same locality but so only in a limited number of cranial dimensions. Peterson (1973 : 601) has reported a subadult female of *wintoni* from Kenya which is comparable to male specimens in most dimensions. The three female specimens of *wintoni* now available from Ethiopia are consistently larger in most respects than two males from Kenya (Table 1) or than the male and subadult female specimens reported from Kenya by Peterson (1971 : 885, 886 ; 1973 : 601). The number of specimens available is too small to establish any firm evidence of sexual variation in size, and the possibility remains that the population of *wintoni* in Ethiopia consists of larger individuals than does the population in Kenya.

The species occurs (Fig. 3) in KENYA (Thomas, 1901 : 460 ; Harrison, 1961 : 292 ; Hayman & Hill, 1971 : 49 ; Peterson, 1971 : 885, 887, fig. 1 (head), pl. 1 (fig. 2) (skull) ; Setzer, 1971 : 262, fig. 1c (tragus)) ; Peterson, 1973 : 601, fig. 1 (soft palate), and in ETHIOPIA (B.M. 72.4397-4399, from Koka, Shoa Province, 8°27' N, 39°06' E, at 1700 m).

### *Laephotis namibensis* Setzer, 1971

*Laephotis namibensis* Setzer, 1971 : 259, 263, fig. 1d (tragus). Kuiseb River, near Namib Desert Research Station, Gobabeb, South West Africa.

No specimens are available for examination, the species being represented at present only by the female holotype and paratype in the collections of the United States National Museum of Natural History at the Smithsonian Institution, Washington. From the description *namibensis* is characterized by its very large ears ; well-developed tragus and antitragus ; pale coloration ; large, relatively long and narrow



skull ; relatively long, narrow palate ; and by great inflation of the bullae. It is evidently very similar to *wintoni* but has larger ears (length 24–25 mm) which are broader at the base, and a larger tragus. It is markedly paler in colour than *wintoni*, the dorsal surface pale drab, the ventral surface paler, the hairs tipped with white. Cranially, the braincase is more domed than in *wintoni*, the postorbital region more constricted, the zygomatic arches more arcuate in the vertical plane, the maxillary toothrows more nearly parallel and the bullae more inflated. Although the skull is rather longer than in male specimens of *wintoni* from Kenya, it is only marginally longer than in female specimens from Ethiopia (Table 1).

### *Laephotis angolensis* Monard, 1935

*Laephotis angolensis* Monard, 1935 : 45. Tyihumbwé (Chiumbwe River, a tributary of the Kasai, 15 km west of Dala), Angola.

Smaller than *wintoni* or *namibensis* (length of forearm 32–35 mm, condylobasal length c. 12.9 mm) with smaller, narrower ears (length from meatus less than 16 mm) ; tragus (Fig. 1b) smaller than in *wintoni* or *namibensis* (vide Setzer, 1971 : 263, fig. 1), less broadened and rather more spatulate. Colour apparently similar to that of *wintoni* but the only available specimens are in alcohol and have been so for some years. According to Setzer (1971 : 260) *namibensis* is paler than *angolensis*. Skull very much smaller than in *wintoni* or *namibensis* (Table 1), the bony part of the post-palatal extension much shorter than in *wintoni*, its length from a line across the rear faces of  $m^3-3$  to the anterior edge of the mesopterygoid fossa less than the distance from the anterior edge of the mesopterygoid fossa to the tips of the pterygoid hamulars, not exceeding it as in that species (Table 2).

A number of specimens have been allocated hitherto (Hayman & Hill, 1971 : 49) to *angolensis*. These include a further example from Angola, from a locality 35 miles east of Dande, in the collections of the American Museum of Natural History, New York (Hill & Carter, 1941 : 49) which is accepted as representative of *angolensis* by Setzer (1971 : 260 et seq.). Specimens from Zambia, Zaire and Botswana were regarded previously as *angolensis* but Setzer (1971 : 260) took the sole example from Botswana as the holotype of a new species, *botswanae*, to which he referred such of the material from Zambia and Zaire as he was able to examine. Two (B.M. 55.1134–1135) of the three specimens so far reported from Zambia were seen by Setzer : the third is the example (Harrison Zoological Museum 1.2533) discussed by Peterson (1971 : 885, 888 ; 1973 : 602) which apparently also represents *botswanae* (vide infra).

The specimens (B.M. 57.436, 57.438) from Zaire seen by Setzer are from a series of ten collected at Mumene, 70 km east of Lumbumbashi (= Elizabethville), Katanga, which, with a further three from the nearby locality of Musonge, 2 km to the west, were originally reported by Hayman (1957 : 43). This author examined ten of these ; four (B.M. 57.436–438 from Mumene, B.M. 57.435 from Musonge) are in the collections of the British Museum (Natural History) and a further six (M.R.A.C. 26.402–406 from Mumene, M.R.A.C. 26.407 from Musonge) in the Musée Royale de l'Afrique Centrale, Tervuren. Hayman, Misonne & Verheyen (1966 : 50) list nine specimens

at Tervuren but no more than six can be found (Thys van den Audenaerde, in litt.), corresponding to the total examined in London by Hayman.

Of these, eight must be referred to *botswanae* but two, B.M. 57.435 and B.M. 57.437 apparently represent not *botswanae* but *angolensis* as it is understood by Setzer (1971 : 260 et seq.). They agree closely with the descriptions of this species by Monard (1935 : 45) and Hill & Carter (1941 : 49) : their measurements (Table 1) are similar to those of the holotype and to those of the second Angolan example as they are reported by Hill & Carter (p. 176) and Setzer (1971 : 261). The specimens differ from the others in the series from Zaire in smaller size, narrower tragus with generally a less angular posterior margin, and in slightly shorter, narrower rostrum and palate. The tragus of B.M. 57.435 is a little wider than that of B.M. 57.437 while among *botswanae* the tragus of M.R.A.C. 26.404 is rather narrow, with its posterior margin a little less angular than is usual in that series. Setzer (1971 : 262) notes that *botswanae* has a more massive rostrum than *angolensis* but the rostrum in B.M. 57.435 and B.M. 57.437 is no more than slightly shorter and not less massive when compared with the narrowest of *botswanae*. The rearward extension of the occipital crests, said by Setzer to be less in *botswanae*, does not differ consistently in the specimens examined. The toothrows of B.M. 57.435 are more divergent posteriorly than those of B.M. 57.437 to approach specimens referred to *botswanae* although, as Setzer notes of this species, its toothrows are generally more divergent posteriorly than in *angolensis*. The specimens available do not confirm the statement by Setzer that the bullae in *botswanae* are relatively as well as actually smaller than in *angolensis* : if B.M. 57.435 and B.M. 57.437 correctly represent *angolensis* then the bullae of *botswanae* are proportionately about the same in size and in actual terms a little larger. That *angolensis* and *botswanae* might occur together was suggested by Setzer (1971 : 262) : records (Fig. 3) of *angolensis* are thus restricted to ANGOLA (Monard, 1935 : 45 ; Hill & Carter, 1941 : 49, 176 ; Setzer, 1971 : 260, 263, fig. 1a (tragus)) and probably ZAIRE (Hayman, 1957 : 43 (in part) ; Hayman, Misonne & Verheyen, 1966 : 50 (in part) ; Peterson, 1971 : 885 (in part)).

### *Laephotis botswanae* Setzer, 1971

*Laephotis botswanae* Setzer, 1971 : 260, 263, fig. 1b (tragus). 50 miles west, 12 miles south of Shakawe, Botswana.

Size between *angolensis* and the large species *wintoni* and *namibensis* (length of forearm 34–38 mm, condylobasal length (13.5–14.3 mm) ; ears and tragus generally a little larger than in *angolensis* (length of ear from meatus more than 16 but less than 18 mm) but markedly smaller than in either of the large species. Tragus (Fig. 1c) usually with a distinct angularity in its posterior margin at its widest point. Dorsal surface similar in colour to *wintoni* ; ventral surface paler than in that species, the hairs more liberally tipped with buffy white rather than pale brown. Rostrum relatively long, narrow ; maxillary toothrows slightly divergent posteriorly ; post-palatal region as in *angolensis*, the length of its bony part from a line across the rear faces of  $m^{3-3}$  to the anterior edge of the mesopterygoid fossa less than the distance

from the anterior edge of the mesopterygoid fossa to the tips of the pterygoid hamulars (Table 2).

The specimen (Harrison Zoological Museum 1.2533) from Ndola, Zambia, which Peterson (1971 : 888) thought might represent the female of *wintoni* or possibly an

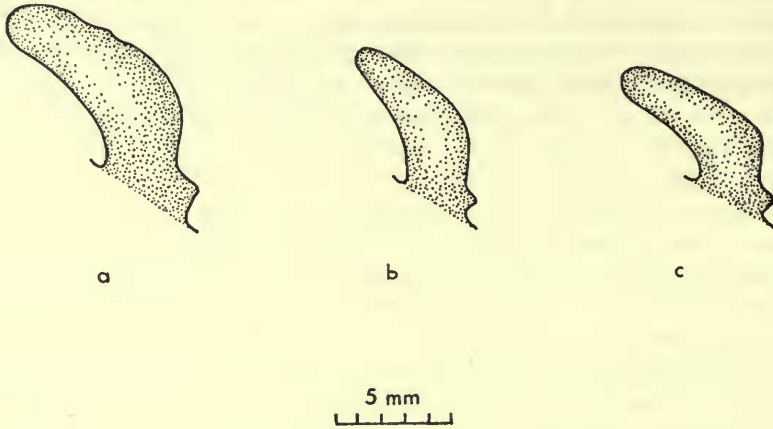


FIG. 1. Tragus of (a) *Laephotis wintoni*; (b) *L. angolensis*; (c) *L. botswanae*.

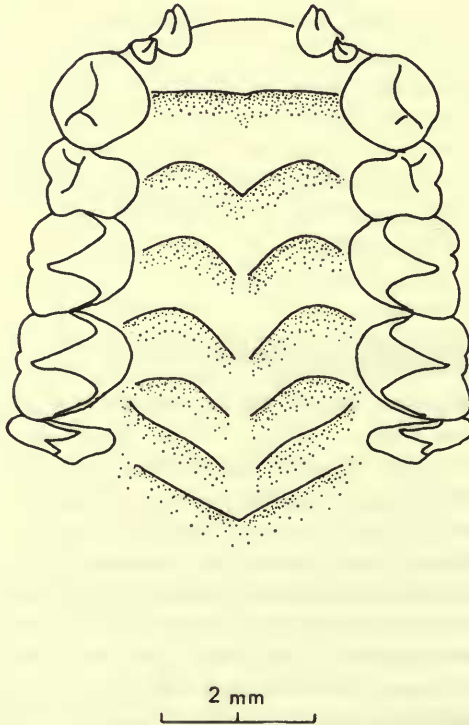


FIG. 2. Palate ridges of *Laephotis wintoni*.



FIG. 3. Distribution of ● *Laephotis wintoni*; ▲ *L. namibensis*; ▼ *L. angolensis*; ■ *L. botswanae*.

undescribed taxon and later (1973 : 602) closely related to *botswanae* proves in fact referable to this species. Although larger than specimens from Zaire or than those (B.M. 55.1134-1135) from Solwezi Boma, Zambia (12°10'S, 26°30'E) its tragus (from the dry specimen) is angular posteriorly and the specimen agrees precisely in coloration with the other examples from Zambia, differing in this respect from the holotype of *wintoni* in its distinctly paler, more buffy white underparts, especially posteriorly.

Specimens referable to this species have been recorded (Fig. 3) from BOTSWANA (Smithers, 1968 : 48, 49 (map), fig. a (head) (as *angolensis*); Setzer, 1971 : 260, 263, fig. 1b (tragus); ZAMBIA (Ellerman, Morrison-Scott & Hayman, 1953 : 78 (as *angolensis*); Ansell, 1957 : 538 (as *angolensis*); Hayman, 1957 : 43 (as *angolensis*); Ansell, 1960 : 21 (as *angolensis*); Peterson, 1971 : 885, pl. 1 (fig. 2) (skulls, including specimen from Ndola) (as *angolensis* and *Laephotis* sp.); Setzer, 1971 : 260); ZAIRE (Hayman, 1957 : 43 (in part, as *angolensis*); Hayman, Misonne & Verheyen, 1966 : 50 (in part, as *angolensis*); Peterson, 1971 : 885 (in part, as *angolensis*); Setzer, 1971 : 260).



TABLE I

Measurements (in mm) of *Laephotis*

Registration No.	Sex	Length of forearm	Length of ear from meatus	Greatest length of skull	Condylabasal length	Condylacanine length	Length orbit-gnathion	Width across anteorbital foramina	Width of orbits across lacrimalis	Least interorbital width	Zygomatic width	Width of braincase	Depth of braincase	Mastoid width	C-1 <sup>1</sup>	m <sup>2</sup> -m <sup>3</sup>	C-m <sup>3</sup>	Length of complete mandible	C-m <sup>3</sup>	Locality	
<i>wintoni</i>																					
BM 1.5.6.5*	♂	37.2	—	15.8	15.2	14.9	3.6	4.5	5.2	3.7	—	7.4	4.8	8.5	4.3	5.5	5.0	10.6	5.5	Kenya	
HZM 2.3020	♂	36.6	—	15.8	15.2	14.9	3.7	4.6	5.4	3.7	—	7.3	4.8	8.0	4.5	5.7	5.0	10.5	5.4	Kenya	
ROM 363681	♂	36.8	—	16.1	15.4	—	—	—	—	3.9	9.1	—	5.0	8.1	4.7	5.9	5.1	—	5.5	Kenya	
ROM 66245*	♂	37.8	21	16.0	15.4	—	—	—	—	3.8	8.4	—	4.8	8.0	4.3	5.5	4.9	—	5.4	Kenya	
BM 72.4397	♂	40.7	21.4	16.3	15.6	15.4	3.4	4.4	5.5	3.7	8.9	7.4	4.8	8.3	4.5	5.6	5.2	10.8	5.6	Ethiopia	
BM 72.4398	♂	40.2	21.1	16.3	15.5	15.4	3.5	4.7	5.4	3.9	9.4	7.5	4.7	8.5	4.6	5.9	5.2	10.7	5.5	Ethiopia	
BM 72.4399	♂	40.2	21.5	16.2	15.8	15.6	3.6	4.6	5.3	3.7	9.1	7.6	4.8	8.5	4.5	5.5	5.0	—	5.5	Ethiopia	
<i>namibensis</i>																					
USNM 342152 <sup>3</sup>	♀	38.2	25	16.5	—	—	—	—	—	3.2	9.0	7.5	4.7	7.4	4.0	5.2	4.9	—	—	S.W. Africa	
USNM 342153 <sup>3</sup>	♂	38.6	24	16.5	—	—	—	—	—	3.6	—	7.6	4.9	—	4.0	5.4	5.0	—	—	S.W. Africa	
<i>angolensis</i>																					
— <sup>4</sup>	♂	35	—	13.7	—	—	—	—	—	3.4	6.7	6.6	4.4	7.4	4.0	4.9	4.3	—	—	Angola	
AMNH 87244 <sup>3,5</sup>	♂	32.4	—	13.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Angola	
<i>(?) angolensis</i>																					
BM 57.435	♂	35.5	16.0	13.8	13.1	12.9	2.8	3.9	4.8	3.4	8.1	6.8	4.5	7.4	3.8	5.2	4.3	8.8	4.8	Zaire	
BM 57.437	♀	34.3	15.9	13.7	12.9	12.9	2.8	3.7	4.7	3.5	—	6.8	4.3	7.4	3.7	5.0	4.3	8.9	4.7	Zaire	
<i>botswanae</i>																					
USNM 425349 <sup>3</sup>	♂	37.3	—	14.5	—	—	—	—	—	3.4	8.3	7.0	4.7	—	4.4	5.3	4.7	—	—	Botswana	
BM 57.436	♀	37.2	17.1	—	—	—	—	4.4	5.0	3.5	—	6.8	—	—	3.9	5.6	4.6	—	5.1	Zaire	
BM 57.438	♀	37.6	16.5	—	—	—	3.1	4.3	5.2	3.7	—	—	—	—	4.0	5.7	4.6	—	5.0	Zaire	
MRAC 26.402	♂	37.8	16.5	14.5	13.6	13.5	3.1	4.2	5.0	3.7	—	7.4	4.6	7.9	4.0	5.4	4.5	9.4	4.9	Zaire	
MRAC 26.403	♀	35.8	16.3	14.3	13.5	13.4	3.0	4.2	5.1	3.7	—	7.3	4.6	7.6	4.0	5.4	4.6	9.1	4.9	Zaire	
MRAC 26.404	♀	37.0	16.8	14.6	13.7	13.6	3.1	4.1	5.1	3.5	—	7.1	4.6	7.8	4.0	5.4	4.5	9.5	5.0	Zaire	
MRAC 26.405	♀	36.4	17.9	14.3	13.6	13.5	3.0	4.1	4.9	3.6	—	7.2	4.7	7.8	3.8	5.2	4.5	9.2	5.0	Zaire	
MRAC 26.406	♀	36.1	17.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Zaire	
MRAC 26.407	♀	36.7	17.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Zaire	
BM 55.1134	♂	34.2	—	—	13.8	—	3.0	4.1	5.0	3.7	—	7.0	4.5	7.3	—	—	—	—	—	5.1	Zambia
BM 55.1135	♀	35.3	—	14.3	13.5	13.4	3.1	4.2	5.3	3.6	—	7.1	4.5	7.5	4.0	5.5	4.6	9.2	4.9	Zambia	
HZM 1.2533	♀	37.0	—	15.0	14.3	14.2	3.1	4.5	5.5	3.7	8.8	7.4	4.6	8.4	4.3	5.8	4.8	9.9	5.2	Zambia	

\* Holotype.

<sup>1</sup> Peterson, 1971 : 886.<sup>2</sup> Peterson, 1973 : 601.<sup>3</sup> Setzer, 1971 : 261.<sup>4</sup> Monard, 1935 : 47.

BM British Museum (Natural History), London.

HZM Harrison Zoological Museum, Sevnoaks.

ROM Royal Ontario Museum, Toronto.

USNM United States National Museum of Natural History, Washington.

AMNH American Museum of Natural History, New York.



TABLE 2

Palatal measurements (in mm) of *Laephotis*

Registration No.	Sex	Palatal length	Length from rear of pre-palatal emargination to anterior edge of mesopterygoid fossa	Length from rear of pre-palatal emargination to line across posterior faces of m <sup>3-3</sup>	Length from line across posterior faces of m <sup>3-3</sup> to anterior edge of mesopterygoid fossa	Length from anterior edge of mesopterygoid fossa to tip of pterygoid hamulars	Length from line across posterior faces of m <sup>3-3</sup> to tip of pterygoid hamulars	Locality
<i>wintoni</i>								
BM 1.5.6.5*	♂	7.9	6.5	4.4	2.1	1.9	4.0	Kenya
HZM 2.2030	♂	—	—	—	—	—	—	Kenya
BM 72.4397	♀	8.1	6.8	4.4	2.4	1.8	4.2	Ethiopia
BM 72.4398	♀	8.2	6.4	4.2	2.2	2.0	4.2	Ethiopia
BM 72.4399	♀	8.5	6.8	4.3	2.5	1.9	4.4	Ethiopia
<i>(?) angolensis</i>								
BM 57.435	♂	6.2	4.8	3.6	1.2	2.0	3.2	Zaire
BM 57.437	♀	6.1	4.8	3.5	1.3	1.9	3.2	Zaire
<i>botswanae</i>								
BM 57.436	♀	—	5.4	4.0	1.4	—	—	Zaire
BM 57.438	♀	6.7	5.2	3.8	1.4	2.0	3.4	Zaire
MRAC 26.402	♀	6.6	5.2	3.7	1.5	2.0	3.5	Zaire
MRAC 26.403	♀	6.6	5.2	3.7	1.5	1.9	3.4	Zaire
MRAC 26.404	♀	6.4	5.2	3.8	1.4	1.9	3.3	Zaire
MRAC 26.405	♀	6.5	5.3	3.8	1.5	1.9	3.4	Zaire
BM 55.1134	♂	6.5	5.2	3.7	1.5	—	—	Zambia
BM 55.1135	♀	6.4	5.2	3.7	1.5	1.9	3.4	Zambia
HZM 1.2533	♀	7.1	5.6	4.1	1.5	2.0	3.5	Zambia

BM British Museum (Natural History), London.

HZM Harrison Zoological Museum, Sevenoaks.

MRAC Musée Royale de l'Afrique Central, Tervuren.

\* Holotype.

## SUMMARY

The majority of specimens of *Laephotis* hitherto reported in the literature are allocated to the appropriate one of the four species recognized in the most recent study of this genus, and these are briefly reviewed. Female specimens of *L. wintoni* are recorded from Ethiopia, whence until now the genus has been unreported.

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